



Atty. Dkt. No. 040302-0502

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant: Tetsuya KAMIHARA  
Title: FUEL CELL SYSTEM  
Appl. No.: 10/553,945  
Filing Date: 10/21/2005  
Examiner: Eugenia Wang  
Art Unit: 1795  
Confirmation  
Number: 5799

**REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
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Sir:

The control unit in claim 1, which is "configured to" perform certain functions, requires the structure to perform such functions. Such configuration of the control unit is more than mere intended use or manner of operating the apparatus of claim 1, as the Examiner continues to assert, for example on pages 5 to 6 of the Answer. Rather, the language "configured to" in claim 1 requires structure in the control unit to perform such functions. In other words, the control unit must be programmed or otherwise configured to perform the recited functions.

The Examiner states in the bridging paragraph on pages 12-13 of the Answer:

It is submitted that "programmed to" and "configured to" are not synonymous, as being configured can be interpreted to relate to the structure of the computer/controller as it is connected to its peripheral extensions (and not the functioning of the computer/controller). Furthermore, it is noted that nowhere in the disclosure as originally filed is any type of

program/programming appreciated, as such terms are not within the originally filed disclosure. Accordingly, Appellant's current interpretation as to "configured to" appears to contradict the interpretation with respect to the disclosure as originally filed (as no programming is appreciated). Thus, the language "configured to" is broader than Appellant's currently applied interpretation.

Appellant submits, however, that while "configured to" may be broader than "programmed to," the pertinent point is that a control unit "configured to" perform certain functions requires structure to perform those functions in the same way that a control unit "programmed to" perform certain functions would require structure. That is, a control unit "configured to" perform certain functions requires structure, such as hardwiring or programming software, to perform the recited functions. Even if the phrase "programmed to" may be limited to software programming in a way that the phrase "configured to" is not, both phrases require structure to perform certain functions.

Moreover, appellant notes that in certain disclosed embodiments of the invention, the control unit provides commands to provide controlling functions. For example, as disclosed on page 5, lines 20-26, the controller 21 may produce an open command to the purge valve 12. Because the control unit produces a command for control functions, the control unit must inherently have some structure to produce such as command, whether or not that structure is software programming and/or hardwiring. The control unit must inherently operate according to some algorithm and input values, where such algorithm necessarily must be embodied in stored software or hardwiring of the control unit.

The point is, whether or not "configured to" and "programmed to" have the same scope, both phrases require structure in an apparatus claim to perform functional features recited in the claim. Such structure is inherent in the apparatus.

In response to Appellant's citation of *Ex parte Schneider*, The Examiner states on page 21 of the Answer:

Examiner respectfully disagrees with Appellant's position and submits that it is not being submitted that that functional language cannot be used to describe claim elements or that such language has not been considered. Rather, it is submitted that the Office's position is that an apparatus must be distinguished

from the prior art in terms of structure rather than function (see MPEP § 2114).

Appellant does not disagree with the proposition that an apparatus must be distinguished from the prior art in terms of structure. Appellant submits, however, as discussed above, that a control unit configured to perform certain functions, inherently must have the structure to perform such functions. Accordingly, any prior art which is not configured to perform the certain functions does not have the structure of the control unit. In the present case, the Examiner is improperly ignoring functional limitations in the claims which impart structure to the claimed apparatus.

Moreover, appellant submits that *Ex parte Schneider* stands for the proposition that a claimed controller configured to perform certain functions, must have the structure to perform such functions. As noted in the Appeal Brief, the Board of Patent Appeals and Interferences in *Ex parte Schneider* 2009 WL 191989 (Bd. Pat. App. & Inter. 2009) found that the functional limitations of a controller "configured to" perform functions must be considered when interpreting an apparatus claim. Indeed, the Board distinguished a prior art system based on this interpretation. *Id.* at \*5-6. Thus, a controller configured to perform certain functions must inherently have the structure to perform such functions, and may be distinguished from prior art which does not have such structure to perform such functions.

Appellant again notes that functional limitations in an apparatus claim can impart structural features in the claim. For example MPEP 2173.05(g) states in part:

In *Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006-08 (Fed. Cir. 2004), the court noted that the claim term "operatively connected" is "a general descriptive claim term frequently used in patent drafting to reflect a functional relationship between claimed components," that is, the term "means the claimed components must be connected in a way to perform a designated function." "In the absence of modifiers, general descriptive terms are typically construed as having their full meaning." *Id.* at 1118, 72 USPQ2d at 1006. In the patent claim at issue, "subject to any clear and unmistakable disavowal of claim scope, the term 'operatively connected' takes the full breath of its ordinary meaning, i.e., 'said tube [is] operatively connected to said cap' when the tube and cap are arranged in a manner capable of performing the function of filtering." *Id.* at 1120, 72 USPQ2d at 1008., and

In a claim that was directed to a kit of component parts capable of being assembled, the Court held that limitations such as "members adapted to be positioned" and "portions . . . being resiliently dilatable whereby said housing may be slidably positioned" serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976). **(emphasis added)**

In the present case, the control unit of claim 1 must have structural features to perform its recited function.

For the foregoing reasons, it is submitted that the PTO's rejections are erroneous, and reversal of the applied rejections is respectfully requested.

Respectfully submitted,

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